



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-7B26 BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 8CM051 PRESSURE RATIO (π_{00}): 27.6
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 117.0

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|--|------|------|-----------------|--------------|
| D _p /F ₀₀ (g/kN) or SN | 4.7 | 37.2 | 61.0 | 18.9 |
| AS % OF ORIGINAL LIMIT | 24.0 | 31.5 | 64.0 | 83.4 |
| AS % OF CAEP/2 LIMIT (NO _x) | | | 80.1 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 96.6 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 109.7 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 130.5 | |

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

| MODE | POWER SETTING (%F ₀₀) | TIME (minutes) | FUEL FLOW (kg/s) | EMISSIONS INDICES (g/kg) | | | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|--------------------------|-------|-----------------|--------------|
| | | | | HC | CO | NO _x | |
| TAKE-OFF | 100 | 0.7 | 1.221 | 0.10 | 0.20 | 28.80 | 14.7 |
| CLIMB OUT | 85 | 2.2 | 0.999 | 0.10 | 0.60 | 22.50 | 11.9 |
| APPROACH | 30 | 4.0 | 0.338 | 0.10 | 1.60 | 10.80 | 0.0 |
| IDLE | 7 | 26.0 | 0.113 | 1.90 | 18.80 | 4.70 | 0.0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 441 | 361 | 3533 | 6149 | - |
| NUMBER OF ENGINES | | | | 1 | 1 | 1 | 1 |
| NUMBER OF TESTS | | | | 3 | 3 | 3 | 3 |
| AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX) | | | | 3.1 | 30.3 | 52.6 | 14.7 |
| SIGMA (D _p /F ₀₀ in g/kN, or SN) | | | | | | | |
| RANGE (D _p /F ₀₀ in g/kN, or SN) | | | | | | | |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|-------------|
| BAROMETER (kPa) | 97.8-98 |
| TEMPERATURE (K) | 294-297 |
| ABS HUMIDITY (kg/kg) | 0.01-0.0157 |

FUEL

| | |
|----------|-----------|
| SPEC | Jet A |
| H/C | 1.86-1.97 |
| AROM (%) | 16.9-17.7 |

MANUFACTURER: CFM International
 TEST ORGANIZATION: CFM56-7B Eval Engineering
 TEST LOCATION: Peebles Test Operation (PTO), Peebles, Ohio
 TEST DATES: 01/07/1996

REMARKS

1. FAA Certification Report CR-997, Dec 96.
2. Engine S/N 874-101/01
3. Characteristic D_p/F₀₀ NO_x incorrectly entered originally [3CM033]
4. Issue 15; D_p/F₀₀ NO_x corrected from 63.2 to 61.0 and % of standards to 64.0, 80.1 & 96.6

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)